Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) A method of preparing a protein array based on biochemical protein-protein interaction, comprising the steps of:

(a) depositing on a substrate an array of a first protein, the first protein comprising a PDZ domain; and

(b) applying a second protein, which comprises an amino acid sequence (S/T)-X-(V/I/L)-COOH, to the first protein array, the amino acid sequence (S/T)-X-(V/I/L)-COOH of the second protein binding to the PDZ domain of the first protein,

wherein each hyphen represents a peptide bond, each parenthesis encloses amino acids which are alternative to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group ~~comprising the twenty naturally occurring amino acids~~ consisting of alanine, cysteine, aspartic acid, glutamic acid, phenylalanine, glycine, histidine, isoleucine, lysine, leucine, methionine, asparagine, proline, glutamine, arginine, serine, threonine, valine, tryptophan and tyrosine.

2. (original) The method of claim 1, wherein the amino acid sequence (S/T)-X-(V/I/L) is fused to the C-terminal of the second protein.

3. (original) The method of claim 1, wherein the protein array is maintained under physiological condition, and is used to screen one or more drug targets.

4. (original) The method of claim 1, wherein the first protein deposited in step (a) is in a soluble buffer.

5. (original) The method of claim 1, wherein the first protein deposited in step (a) is immobilized in a gel.

6. (original) The method of claim 1, wherein the substrate includes a plurality of microwells contained therein, and the first protein is deposited in step (a) into the microwells.

7. (original) The method of claim 1, wherein the substrate includes a glass plate, and the first protein array is printed onto the glass plate in step (a).

8. (original) The method of claim 1, wherein the substrate includes a glass plate and a plurality of gel pads on the glass plate, and the first protein is deposited in step (a) onto the gel pads.

9. (original) The method of claim 1, wherein the first protein is deposited on the substrate by a robot.

10. (currently amended) The method of claim 1, wherein at least one array element ~~of the protein array~~ includes an oligonucleotide.

11. (currently amended) The method of claim 1, wherein at least one array element ~~of the protein array~~ includes messenger RNA.

12. (currently amended) The method of claim 1, wherein at least one array element ~~of the protein array~~ includes DNA.

13. (currently amended) The method of claim 1, wherein at least one array element includes a sugar.

Claims 14 and 15 (canceled).

16. (currently amended) A method of preparing a ~~protein~~ polypeptide array, comprising the steps of:

(a) depositing on a substrate an array of a first polypeptide, the first polypeptide comprising a PDZ domain; and

(b) applying a second polypeptide which comprises an amino acid sequence (s/T)-X-(V/I/L)-COOH to the first polypeptide array, the amino acid sequence (S/T)-X-(V/I/L)-COOH of the second polypeptide binding to the PDZ domain of the first polypeptide,

wherein each hyphen represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group ~~comprising the twenty naturally occurring amino acids~~ consisting of alanine, cysteine, aspartic acid, glutamic acid, phenylalanine, glycine, histidine, isoleucine, lysine, leucine, methionine, asparagine, proline, glutamine, arginine, serine, threonine, valine, tryptophan and tyrosine.

17. (currently amended) The method of claim 16, wherein at least one array element ~~of the protein array~~ includes an oligonucleotide in addition to the first polypeptide.

18. (currently amended) The method of claim 16, wherein at least one array element ~~of the protein array~~ includes messenger RNA in addition to the first polypeptide.

19. (currently amended) The method of claim 16, wherein at least one array element ~~of the protein array~~ includes DNA in addition to the first polypeptide.

20. (currently amended) The method of claim 16, wherein at least one array element ~~of the protein array~~ includes a sugar

in addition to the first polypeptide.